

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number  
**WO 2005/003446 A1**

(51) International Patent Classification<sup>7</sup>: **D06M 15/356**

(21) International Application Number:  
PCT/AU2004/000860

(22) International Filing Date: 28 June 2004 (28.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2003903431 3 July 2003 (03.07.2003) AU

(71) Applicants (for all designated States except US): **COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION** [AU/AU]; Limestone Avenue, Campbell, ACT 2612 (AU). **UNIVERSITY OF WOLLONGONG** [AU/AU]; Northfields Avenue, North Wollongong, NSW 2500 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HOLCOMBE, Barry, Victor**, [AU/AU]; 67 Cassia Street, Dee why, NSW 2110 (AU). **WATERS, Peter, John**, [AU/AU]; Unit 2,

42 Baird Street, Mulgrave, VIC 3170 (AU). **LOONEY, Mark, Graham**, [AU/AU]; 81 Union Street, Brunswick, VIC 3056 (AU). **KING, David, George**, [AU/AU]; 8 Punt Road, Barwon Heads, VIC 3227 (AU). **WALLACE, Gordon, George**, [AU/AU]; 55 Acacia Avenue, Gwynneville, NSW 2500 (AU). **INNIS, Peter, Charles**, [AU/AU]; 29 Rosemount Street, West Wollongong, NSW 2500 (AU). **ASHRAF, Syed, Aziz**, [AU/AU]; 40 Meadow Street, Parrawanna, NSW 2518 (AU).

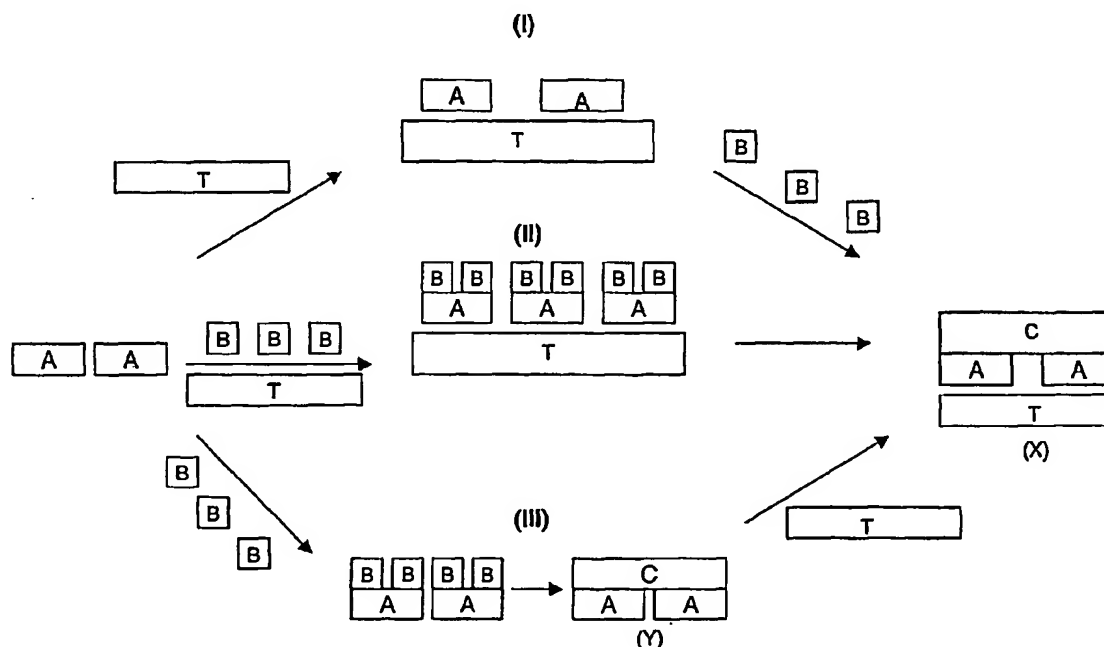
(74) Agent: **GRIFFITH HACK**; 509 St Kilda Road, Melbourne, VIC 3004 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: **ELECTROCONDUCTIVE TEXTILES**



(57) Abstract: An electroconductive textile comprising: a non-conductive textile such as a wool-containing fabric, a macromolecular template which is bonded to or entrapped in the non-conductive textile such as poly 2-methoxyaniline-5-sulfonic acid (PMAS), and a conductive polymer which is ordered by and bonded to the macromolecular template such as polyaniline; in which the macromolecular template binds the conductive polymer to the non-conductive textile.

WO 2005/003446 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*